

WE CLAIM:

1. An electronic device comprising:

a first housing;

a rotatable part mounted rotatably in said first
5 housing and rotatable relative to said first housing
about a first axis which extends in a transverse
direction;

a second housing pivoted to said rotatable part
so as to be rotatable relative to said first housing
10 about a second axis which is perpendicular to said
first axis and so as to be rotatable together with
said rotatable part about said first axis relative
to said first housing between opposite first and
second angular positions; and

15 a positioning unit mounted in said first housing
and including a stopper that is disposed adjacent to
said rotatable part, and that is movable in said
transverse direction relative to said first housing
between an engaging position, in which said stopper
20 moves upwardly to engage one of said rotatable part
and said second housing when said second housing is
positioned at one of said first and second angular
positions, thereby preventing rotation of said
rotatable part and said second housing about said
25 first axis, and a disengaging position, in which said
stopper moves downwardly to disengage from said one
of said rotatable part and said second housing,

thereby permitting rotation of said second housing and said rotatable part about said first axis.

2. The electronic device of Claim 1, further comprising an urging member for urging said stopper
5 to move to said engaging position.

3. The electronic device of Claim 1, wherein said first housing has an upper wall and a rear end, said upper wall of said first housing being formed with a pivot-mounting hole adjacent to said rear end of
10 said first housing, said rotatable part projecting upwardly through said pivot-mounting hole, said second housing having a rear end that is pivoted to said rotatable part.

4. The electronic device of Claim 3, further
15 comprising an urging member for urging said stopper to move to said engaging position.

5. The electronic device of Claim 3, wherein said stopper projects through said pivot-mounting hole, and has an engaging end with an end face that extends
20 outwardly of said pivot-mounting hole in said transverse direction and that faces rearward, said rotatable part having two opposite engaging ends, each of which has an end face that conforms to and that is in face-to-face contact with said end face
25 of said engaging end of said stopper when said stopper is positioned at said engaging position and when said second housing is positioned at one of said first and

second angular positions.

6. The electronic device of Claim 4, wherein said positioning unit further includes a seat that is mounted securely in said first housing below said stopper and that is formed with a pair of through-holes, said stopper including a base plate that is exposed from said pivot-mounting hole and that extends in a lateral direction relative to said upper wall of said first housing, and a pair of posts extending downwardly from said base plate through said through-holes, respectively, said urging member including a pair of coil springs, each of which is sleeved around a respective one of said posts and each of which abuts against a periphery of a respective one of said through-holes and said base plate.

7. The electronic device of Claim 6, wherein said positioning unit further includes a catch unit mounted on said seat between said through-holes and including a casing that is formed with an upper opening, a spring biased catch mounted slidably in said casing and formed with a pair of elastic clamping arms, and a second urging member for urging said catch to move upwardly away from said upper opening, said clamping arms cooperating with each other to define a clamping space therebetween and having opposite end faces that are spaced apart from each other by a width greater than that of said upper opening in said casing,

said stopper further including a latch that extends downwardly from said base plate into said clamping space and that abuts against said catch, said catch being slidable between a catch position, in which said clamping arms move into said casing through said upper opening and are pressed by said casing to move elastically toward each other to clamp said latch when said stopper is moved downwardly to said disengaging position, thereby preventing upward movement of said stopper to said engaging position, and a release position, in which, said clamping arms are moved out of said casing by urging action of said second urging member and are released from said casing to move elastically away from each other to release said latch, thereby permitting upward movement of said stopper to said engaging position.

8. The electronic device of Claim 6, wherein said base plate of said stopper is formed with an arcuate guiding groove that opens upwardly and that has two opposite ends, said rotatable part being formed with a pair of opposing guides that protrude downwardly therefrom and that are laterally and respectively aligned with said opposite ends of said guiding groove when said stopper is positioned at said disengaging position so as to permit receiving of one of said guides into said guiding groove during rotation of said second housing and said rotatable part about said

first axis.

9. The electronic device of Claim 6, wherein said base plate of said stopper is formed with a recess that opens upwardly and that is defined by a recess-
5 defining wall which is formed with a laterally extending slit, said positioning unit further including a latch that has a head received in said recess, a shank extending downwardly from said head through said slit, and a tail extending laterally from
10 said shank, said positioning unit further including a lug projecting downwardly and inwardly from said upper wall of said first housing and disposed adjacent to said latch, said lug being formed with a latch hole, said latch being slidable along the length of said
15 slit between a locking position, in which said tail of said latch moves into and engages said latch hole when said stopper is positioned at said disengaging position, thereby preventing upward movement of said stopper to said engaging position, and an unlocking
20 position, in which said tail moves away and disengages from said latch hole, thereby permitting upward movement of said stopper to said engaging position.
10. The electronic device of Claim 4, wherein said rotatable part is formed with a pair of opposing
25 laterally extending engaging tongues, said stopper including a spring-biased base plate that is urged by said urging member, and that is formed with an

engaging groove which receives and which engages an adjacent one of said engaging tongues when said stopper is positioned at said engaging position and when said second housing is positioned at one of said first and second angular positions, and which moves away and which disengages from said adjacent one of said engaging tongues when said stopper is positioned at said disengaging position.

11. The electronic device of Claim 10, wherein said stopper further includes a button projecting upwardly from said base plate through said pivot-mounting hole.

12. The electronic device of Claim 6, wherein said positioning unit further includes a magnetic Z-shaped latch with two opposite ends, and a second urging member with two opposite ends connected to and abutting respectively against said base plate and one of said opposite ends of said Z-shaped latch, said positioning unit further including a lug mounted securely in said first housing and disposed adjacent to said latch, said lug being formed with a latch hole that receives and that engages the other of said opposite ends of said Z-shaped latch when said stopper is positioned at said disengaging position, thereby preventing upward movement of said stopper to said engaging position, said positioning unit further including a magnetic block that is embedded in said

rotatable part, that is offset from said Z-shaped latch when said second housing is positioned at one of said first and second angular positions, and that is vertically aligned with said Z-shaped latch when
5 said second housing moves to a middle angular position between said first and second angular positions so as to attract said Z-shaped latch to move away from said latch hole and so as to permit disengagement of the other of said opposite ends of said Z-shaped latch
10 from said latch hole, thereby permitting upward movement of said stopper to said engaging position.

13. An electronic device comprising:

a first housing having an upper wall and a rear end, said upper wall being formed with a circular
15 pivot-mounting hole adjacent to said rear end of said first housing, said pivot-mounting hole being defined by a hole-defining wall;

a pivot unit being rotatably mounted in said housing and including a rotatable part that projects
20 upwardly through said pivot-mounting hole and that is rotatable relative to said first housing about a first axis which extends in a transverse direction relative to said upper wall of said first housing, said rotatable part having a first engaging end face
25 that cooperates with a segment of said hole-defining wall to confine a sector of said pivot-mounting hole;

a second housing having a rear end that is

pivoted to said rotatable part so as to be rotatable relative to said first housing about a second axis which is perpendicular to said first axis and so as to be rotatable together with said rotatable part
5 about said first axis relative to said first housing between first and second angular positions; and

a positioning unit including a stopper that has a shape conforming to that of said sector of said pivot-mounting hole, that has a second engaging end
10 face, and that is mounted pivotally on said first housing adjacent to said pivot-mounting hole so as to be rotatable between an engaging position, in which said stopper is received in said sector of said pivot-mounting hole and in which said first and second
15 engaging end faces are in face-to-face contact with each other when said second housing is positioned at one of said first and second angular positions, thereby preventing rotation of said second housing and said rotatable part about said first axis, and
20 a disengaging position, in which said stopper is moved out of said sector of said pivot-mounting hole, thereby permitting rotation of said second housing and said rotatable part about said first axis.

14. An electronic device comprising:

25 a first housing having an upper wall and a rear end, said upper wall being formed with a pivot-mounting hole adjacent to said rear end of said first

housing, and a retaining groove adjacent to said pivot-mounting hole;

a pivot unit being rotatably mounted in said housing and including a rotatable part that projects
5 upwardly through said pivot-mounting hole and that is rotatable relative to said first housing about a first axis which extends in a transverse direction relative to said upper wall of said first housing, said rotatable part having two opposite ends, each
10 of which is formed with an engaging groove;

a second housing having a rear end that is pivoted to said rotatable part so as to be rotatable relative to said first housing about a second axis which is perpendicular to said first axis and so as
15 to be rotatable together with said rotatable part about said first axis relative to said first housing between first and second angular positions; and

a positioning unit including a stopper that is slidably mounted in said retaining groove and that
20 is slidable between an engaging position, in which said stopper extends into and engages said engaging groove in an adjacent one of said ends of said rotatable part when said second housing is positioned at a corresponding one of said first and second
25 angular positions, thereby preventing rotation of said second housing and said rotatable part about said first axis, and a disengaging position, in which said

stopper moves out of and disengages from said engaging groove, thereby permitting rotation of said second housing and said rotatable part about said first axis.